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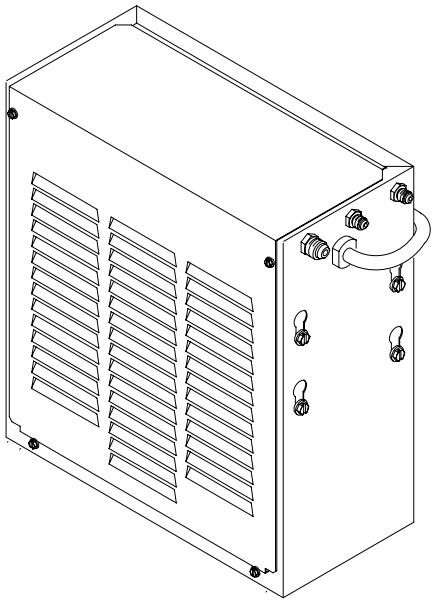
VA13 CARBONATOR OPERATOR'S MANUAL



Part No. 318511002
April 1, 1982
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Control Code D

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION
This Manual must be read and understood before installing or operating this equipment

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SAFETY INFORMATION

Recognize Safety Information

This is the safety-alert symbol. When you see this symbol on our machine or in this manual, be alert to the possibility of personal injury.

Follow recommended precautions and safe operating practices.

Understand Signal Words

A signal word - ***DANGER, WARNING,*** *OR* ***CAUTION*** is used with the safety-alert symbol. ***DANGER*** identifies the most serious hazards.

Safety signs with signal word ***DANGER*** or ***WARNING*** are typically near specific hazards.

General precautions are listed on ***CAUTION*** safety signs. ***CAUTION*** also calls attention to safety messages in this manual.

Follow Safety Instructions

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Learn how to operate the machine and how to use the controls properly. Do not let anyone operate the machine without instructions. Keep your machine in proper working condition. Unauthorized modifications to the machine may impair function and/or safety and affect the machine life.

CO_2 (Carbon Dioxide) Warning

CO_2 Displaces Oxygen. Strict Attention *must* be observed in the prevention of CO_2 (carbon dioxide) gas leaks in the entire CO_2 and soft drink system. If a CO_2 gas leak is suspected, particularly in a small area, *immediately* ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentration of CO_2 gas will experience tremors which are followed rapidly by loss of consciousness and suffocation.

Shipping, Storing, Or Relocating Unit

CAUTION: All water must be purged from the Unit if exposed to freezing temperature. A freezing ambient temperature will cause residual water remaining inside the Unit to freeze resulting in damage to internal components of the Unit.

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GENERAL INFORMATION

TO THE USER OF THIS MANUAL

CAUTION: This Unit must not be installed in an unsheltered outdoor location where it will be exposed to the elements.

This is an Operator's manual for the VA 13 Carbonator (hereafter referred to as a Unit). Retain this manual with your equipment manuals for future reference.

This Unit must be serviced by a qualified Service Person. This Unit contains no User serviceable parts.

CLAIMS INSTRUCTIONS

Claims: In the event of shortage, notify the carrier as well as IMI Cornelius immediately. In the event of damage, notify the carrier. **IMI Cornelius is not responsible for damage occurring in transit, but will gladly render assistance necessary to pursue your claim. Merchandise must be inspected for concealed damage within 15 days of receipt.**

WARRANTY REFERENCE INFORMATION

Warranty Registration Date (to be filled out by customer)
Unit Part Number:
Serial Number:
Install Date:
Local Authorized Service Center:

DESIGN DATA

Table 1. Design Data	
Model Numbers	
115 VAC Unit (With liquid dual check valve)	416411000
115 VAC Unit (With vented dual check valve)	1621
230 VAC Unit (With Liquid dual check valve)	496411000
230 VAC Unit (With Liquid dual check valve)	496411020
230 VAC Unit (With Liquid dual check valve)	496411040

Table 1. Design Data (cont'd)	
Overall Dimensions:	
Width	6-3/8 inches
Height	15 inches
Depth	14 inches
Weight:	
Dry	28-3/4 pounds
Shipping	30-1/4 pounds
Ambient Operating Temperature	40° F to 100° F
Maximum CO_2 Operating Pressure	125 PSI
Electrical Requirements:	
Operating Voltage and Current Draw	See Unit Nameplate

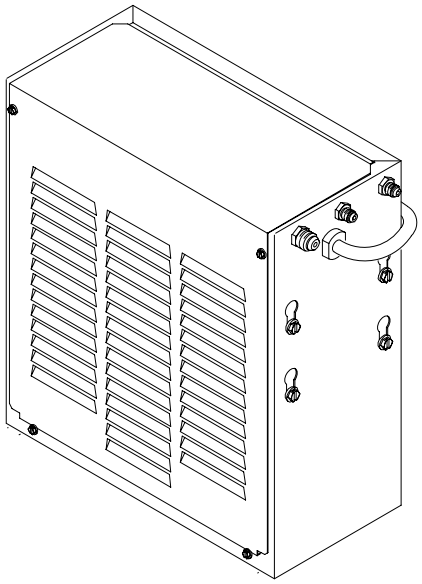

FIGURE 1. VA 13 CARBONATOR

THEORY OF OPERATION

A CO_2 cylinder delivers carbon dioxide (CO_2) gas through an adjustable CO_2 regulator to the carbonated water tank. At the same time, plain water is pumped into the carbonated water tank by the water pump and is carbonated by CO_2 gas also entering the tank. Carbonated water enters the tank until weight of the water in the tank forces the tank and balance control mechanism down to activate the level control switches. Activating the level control switches disrupts electrical power to and stops the water pump motor. As carbonated water is dispensed from the tank, the tank becomes lighter allowing the tank and balance control mechanism to rise which again activates the level control switches. Activating the level control switches restores electrical power to the water pump motor allowing the carbonated water tank to be replenished.

OPERATORS INSTRUCTIONS

IMPORTANT: Only qualified Personnel should service internal components of the Unit.

This section covers operator's cleaning and maintenance responsibilities for the Unit.

CAUTION: To prevent a fire hazard, no object should be placed or stored on top of the Unit.

PERIODIC INSPECTION

CHECKING CO_2 SUPPLY

Make sure CO_2 cylinder regulator assembly 1800-psi gage indicator is not in shaded ("change CO_2 cylinder") portion of dial. If so, CO_2 cylinder is almost empty and must be replaced as instructed.

CHECKING FOR CO_2 AND WATER LEAKS

Check Unit for CO_2 and water leaks and if found, call a qualified Service Person to repair as necessary.

WATER PUMP MOTOR LUBRICATION

The water pump motor bearings must be lubricated periodically. Call a qualified Service Person to perform the bearings lubrication procedure.

ADJUSTING CARBONATOR CO_2 REGULATOR

The carbonator CO_2 regulator should be periodically checked for proper CO_2 gas pressure setting (nominal-80 psig, *DO NOT EXCEED 125 PSIG*). If adjustment is necessary, call a qualified Service Person to perform the adjustment procedure.

WATER PUMP YEARLY MAINTENANCE (OR AFTER WATER SYSTEM DISRUPTION)

UNIT MODEL NO. 416411000, 496411000, 496411020, AND 496411040

The water pump water strainer screen, liquid dual check valve and the carbonated water tank relief valve must be inspected and cleaned at least once a year under normal circumstances and after any water system disruption (plumbing work, earthquake, etc.). Call a qualified Service Person to Inspect and clean the water strainer screen, liquid dual check valve, and the carbonated water tank relief valve.

UNIT MODEL NO. 1621

The water pump water strainer screen and the carbonated water tank relief valve must be inspected and cleaned at least once a year under normal circumstances and after any water system disruption (plumbing work, earthquake, etc.). Call a qualified Service Person to Inspect and clean the water strainer screen and the carbonated water tank relief valve.

IMPORTANT: A vented dual-check valve assembly is installed in this carbonator between the water pump outlet and the water inlet to the carbonator tank. The vented dual-check valve assembly vents carbonated water, and possibly CO_2 gas out of a vent port upon failure of the primary check valves. Should such venting occur, call a qualified Service Person to replace the vented dual-check valve assembly.

PERIODIC CLEANING

Periodically wash all external surfaces of the Unit, rinse with clean water, then wipe dry with a clean soft cloth. DO NOT USE ABRASIVE–TYPE CLEANERS.

REPLENISHING CO_2 SUPPLY

NOTE: When indicator on CO_2 cylinder regulator assembly 2000-psi gage is in shaded ("change CO_2 cylinder") portion of the dial, CO_2 cylinder is almost empty and should be changed.

1. Fully close (clockwise) CO_2 cylinder valve.
2. Slowly loosen CO_2 regulator assembly coupling nut allowing CO_2 pressure to escape, then remove regulator assembly from empty CO_2 cylinder.
3. Unfasten safety chain and remove empty CO_2 cylinder.

WARNING: To avoid personnel injury and/or property damage, always secure the CO_2 cylinder with a safety chain to prevent it from falling over. Should the valve become accidentally damaged or broken off, a CO_2 cylinder can cause serious personnel injury.

4. Position the CO_2 cylinder and secure with a safety chain.
5. Make sure gasket is in place inside the CO_2 regulator coupling nut, then install regulator on the CO_2 cylinder.
6. Open (counterclockwise) CO_2 cylinder valve slightly to allow lines to slowly with gas, then open valve fully to back-seat the valve (back-seating the valve prevents leakage around the valve shaft).
7. Check CO_2 connections for leaks. Tighten any loose connections.

TROUBLESHOOTING

WARNING: Disconnect electrical power to the carbonator to prevent personal injury before attempting any internal maintenance. Only qualified personnel should service the internal components or the electrical wiring.

If repairs to the carbonated water or the plain water systems must be made, disconnect electrical power to the Unit, then shut off CO_2 and plain water sources. Dispense from dispensing valve until carbonator tank CO_2 pressure has been relieved.

Trouble	Probable Cause	Remedy
CARBONATOR WILL NOT OPERATE.	A. Power cord unplugged or circuit breaker open in panel box.	A. Plug in power cord or reset circuit breaker.
	B. Inoperative carbonator.	B. Call a qualified Service Person.
WATER PUMP MOTOR WILL NOT SHUT OFF.	A. Carbonator internal problem.	A. Call a qualified Service Person.
ERRATIC CYCLING OF CARBONATOR.	A. Carbonator internal problem.	A. Call a qualified Service Person.
WATER PUMP MOTOR OPERATES BUT WATER PUMP DOES NOT PUMP WATER.	A. Carbonator internal problems or a water supply line problem.	A. Call a qualified Service Person.
CARBONATOR CARBONATED WATER CAPACITY TOO LOW	A. Carbonator internal problems or a water supply line problem.	A. Call a qualified Service Person.
	B. Water filter clogged.	B. Replace water filter.

WARRANTY

IMI Cornelius Inc. warrants that all equipment and parts are free from defects in material and workmanship under normal use and service. For a copy of the warranty applicable to your Cornelius, Remcor or Wilshire product, in your country, please write, fax or telephone the IMI Cornelius office nearest you. Please provide the equipment model number, serial number and the date of purchase.

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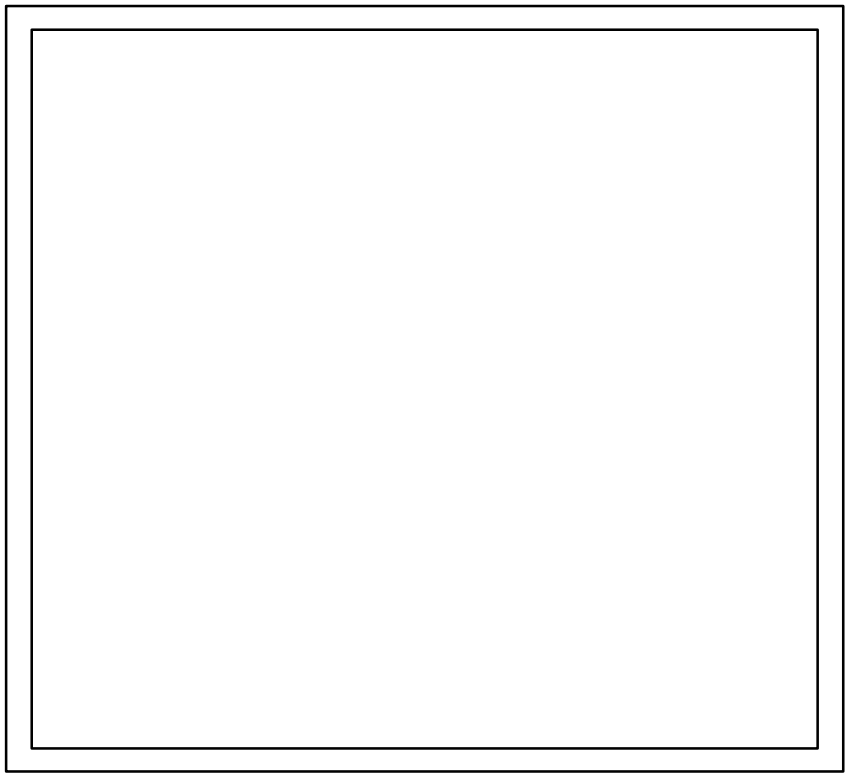

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